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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,975	09/11/2000	Terje Fuglerud	2000-1212A	1872

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EXAMINER

NGUYEN, CAM N

ART UNIT PAPER NUMBER

1754

DATE MAILED: 09/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/623,975

Applicant(s)
Fuglerud et al.

Examiner
Cam Nguyen

Art Unit
1754



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 11, 2000
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

Art Unit: 1754

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed on 9/11/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Copies of the European Patent (EP 0034403) and Great Britain (GB 2144336) were not received in the file. The U.S Patent (3,839,229) cited on the same PTO-1449 Form was received in the file, but since it was already cited on another PTO-1449 Form in the IDS paper filed on 11/27/00, it was not considered.

Specification

3. Applicants' disclosure is objected to because of the following:

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Art Unit: 1754

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to the drawings, each of the lettered items should appear in upper case, without underling or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
 - (b) Cross-Reference to Related Applications.
 - (c) Statement Regarding Federally Sponsored Research or Development.
 - (d) Reference to a "Sequence Listing," a table, or a computer program listing appendix submitted on compact disc (see 37 CFR 1.52(e)(5)).
 - (e) Background of the Invention.
 - 1. Field of the Invention.
 - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
 - (f) Brief Summary of the Invention.
 - (g) Brief Description of the Several Views of the Drawing(s).
 - (h) Detailed Description of the Invention.
 - (i) Claim or Claims (commencing on a separate sheet).
 - (j) Abstract of the Disclosure (commencing on a separate sheet).
 - (k) Drawings.
 - (l) Sequence Listing, if on paper (see 37 CFR 1.821-1.825).
4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1754

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 & 2 are rejected under 35 U.S.C. 103(a) as obvious over Senes et al., "hereinafter Senes", (U.S Pat. 3,839,229) *in view of* Burnett (U.S Pat. 3,653,831).

Senes discloses an ammonia synthesis catalyst which constituted essentially, in the oxidized state, of magnetite Fe_3O_4 , with which are associated a plurality of promoters, i.e., at least three thereof, including the alumina (Al_2O_3), magnesia (MgO), lime (CaO), and potassium oxide (K_2O). The catalyst also contains cobalt, which can be in the form of oxide, and in the amount of between 5 and 10 percents, calculated as the cobalt metal. See col. 2, ln 42-65.

Regarding claim 1, Senes does not disclose titanium oxide. It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have incorporated the titanium oxide into the catalyst of Senes in order to achieve an improved catalyst having promoted activity, because titanium dioxide is a known and useful promoter for the ammonia synthesis catalysts as evidenced by Burnett (see Burnett at col. 1, ln 45-50).

With respect to the claimed titanium oxide concentration, it would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have predetermined optimum concentration of such titanium oxide promoter sufficient for promoting the activity of the catalyst since such determination involves only within routine experimentation

Art Unit: 1754

of one having the ordinary skill in the art, see *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 2, the claimed cobalt concentration is met by the teaching of the reference since the claimed concentration falls within the disclosed concentration (see Senes at col. 2, ln 48-49).

Citations

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McFarland (U.S Pat. 4,009,126), Christmann et al. (U.S Pat. 3,872,027), Munakata et al. (U.S Pat. 6,060,420), Twigg et al. (U.S Pat. 4,863,712), Culross et al. (U.S Pat. 6,136,868), Mauldin et al. (U.S Pat. 5,140,050), Vanderspurt et al. (U.S Pat. 4,764,499), Blanck et al. (U.S Pat. 4,360,504), Richard et al. (U.S Pat. 4,590,177), Muenger et al. (U.S Pat. 4,197,281), Nielsen et al. (U.S Pat. 3,243,386), de Agudelo et al. (U.S Pat. 4,751,210), Sawyer et al. (U.S Pat. 4,828,675), Milam et al. (U.S Pat. 5,962,757), Besozzi et al. (U.S Pat. 4,150,063), Hudson et al. (U.S Pat. 4,608,153), & Maier (U.S Pat. 6,319,876 B1) are cited for related art.

Conclusion

8. Claims 1-2 are pending. Claims 1-2 are rejected. No claims are allowed.


Art Unit: 1754

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (703) 305-3923. The examiner can normally be reached on M-F from 8:30 am. to 6:00 pm, with alternative Monday off.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (before finals) and (703) 872-9311 (after-final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Nguyen/cnn *cnn*
August 27, 2002


Cam Nguyen
Patent Examiner